| RESEARCH ARTICLE

Comparison of the Effects of Financial Literacy on the Financial Behavior of Civil Servants and Private Employees at Millennial Age

Tri Sulastri[1] ✉ and Rilla Gantino[2]
[12]Economic Business Faculty, Universitas Esa Unggul, Indonesia
Corresponding Author: Tri Sulastri, **E-mail**: Triesulastri47@gmail.com

| ABSTRACT
This study aims to determine the effect of financial literacy on materialism, compulsive buying, indebtedness, and saving behavior. In addition, it determines the influence of materialism on compulsive buying and indebtedness, as well as compulsive buying on indebtedness among civil servants and private employees in the Jakarta area, especially those of millennial age. Data collection was carried out online using a Likert scale. The population in this study was composed of private employees and civil servants working in the Jakarta area, with a total of 538 respondents. The research method used is quantitative research with SEM-Lisrel analysis. The results of this study show that high financial literacy (FL) is not able to reduce the level of indebtedness (I) among civil servants and private employees. High materialism (M) correlated with increased levels of indebtedness (I) in both groups of workers. High compulsive buying (CB) only has the effect of increasing indebtedness (I) in civil servants but does not apply to private employees. High materialism (M) encourages an increase in the rate of compulsive buying (CB) in civil servants but not in private employees. Furthermore, it was found that high financial literacy (FL) has the potential to reduce materialism (M) in civil servants but does not apply to private employees. Meanwhile, high financial literacy (FL) also has a positive impact on reducing compulsive buying (CB) behavior in civil servants and private employees. However, financial literacy (FL) does not have a positive influence on saving behavior (SB) among civil servants and private employees. Furthermore, in terms of comparison between private employees and civil servants, this study shows that private employees tend to have higher levels of materialism and compulsive buying compared to civil servants. However, there were no significant differences in levels of financial literacy, indebtedness, or saving behavior between the two groups. The findings mean that efforts to improve financial literacy and reduce debt levels could be undertaken with similar approaches for both groups.

1. Introduction

Moosa & Ramiah (2017) state that the importance of financial literacy lies in the individual's ability to make wise financial decisions and minimize the impact of behavioral bias in financial decision making. By having a good understanding of financial literacy, one can learn how to manage money appropriately, choose investments that fit financial goals, and reduce financial risks (Moosa & Ramiah, 2017). In line with the statement, Rieckens (2019) states that financial literacy plays an important role in their financial behavior, as it can help them make better financial decisions and minimize unwanted financial risks, thus helping to achieve their long-term financial goals, such as early retirement and financial freedom. Financial literacy helps individuals avoid bad financial decisions, such as borrowing money at high interest rates, making high-risk investments without considering the risk profile or buying financial products that don't fit their needs (Ogaki & Tanaka, 2017).

Similar to the previous statement, Lusardi (2019), Pangestu & Karnadi (2020) also revealed that with Financial Literacy For the good, individuals can make smarter financial decisions and minimize the impact of behavioral bias on financial decision making. Financial literacy can also help individuals manage finances properly, choose appropriate investments, reduce financial risks, and avoid excessive consumptive behavior (Rieckens, 2019). Further, Potrich & Vieira (2018), Abdullah et al. (2019), Rieckens (2019) added that financial literacy plays a role in determining individual behavioral factors related to finance, such as materialism, compulsive buying, and indebtedness. Instead, financial literacy is low in individuals, less likely to pay attention to credit costs and more prone to debt (Lusardi et al., 2010; Lusardi & Tufano, 2015; Potrich & Vieira, 2018). Moosa & Ramiah (2017) explained that materialism, compulsive buying and indebtedness can trigger bad financial behavior, such as overspending, borrowing at high interest, and difficulty accumulating wealth.

Next, Kaiser & Menkhoff (2017) says that Materialism may have an impact on the improvement of indebtedness and Compulsive Buying Behavior, where materialism refers to a person's tendency to give more value to material things and wealth, which can lead to excessive consumptive behavior. Further, Kaiser & Menkhoff (2017) explain that if materialism is high, one can encourage individuals to buy things they can't pay for, thus triggering the occurrence of indebtedness. Other opinions also state that indebtedness in an individual is closely related to compulsive buying, where compulsive buying is a consequence of the attitude of materialism owned by the individual (Potrich & Vieira, 2018). Moreover, materialism also contributes to determining the level of indebtedness (Xavier et al., 2019; Pangestu & Karnadi, 2020).

Doumpos et al. (2019) reveal that indebtedness also has a relationship with the use of credit cards, where, in this case, credit cards act as a means of making purchases. Further, Doumpos et al. (2019) Credit card users are advised to improve a good understanding of financial concepts to make better decisions and reduce unnecessary credit risk because being careless or excessive can cause them to get stuck in a cycle of debt that is difficult to manage, especially if you take more than one credit card with a high limit. The existence of Financial Literacy In individuals can lead them to be able to control materialism better, resulting in behavior compulsive buying, and indebtedness can also be minimized (Potrich & Vieira, 2018). Ogaki & Tanaka (2017) conclude that a level of Financial Literacy Being high is very important in avoiding unhealthy financial behaviors such as indebtedness, compulsive buying, materialism, and careless use of credit cards. Therefore, there need to be efforts to improve financial literacy in the community to help reduce the risk of unhealthy financial behaviors and improve the overall financial condition (Ogaki & Tanaka, 2017).

Next, Doumpos et al. (2019) explained that Financial Literacy could increase saving behavior or someone's saving habits. With a better understanding of financial management, one can make better financial decisions, including when it comes to saving (Doumpos et al., 2019). A person who has a level of Financial Literacy High students tends to understand the importance of saving for future goals such as retirement preparation, emergency funds, and other sudden needs (Doumpos et al., 2019). Alshebami & Aldhyani (2022) Found a positive impact of Financial Literacy towards saving behaviour, where individuals with Financial Literacy A good one will have the ability to control themselves and be able to process finances well. Gilenko & Chernova (2021) also revealed that financial literacy is high in individuals, which leads them to engage in positive financial behaviors, where they use their financial knowledge to plan for the future with the goal of gaining greater prosperity and savings.

Financial literacy refers to knowledge and understanding of financial concepts as well as the ability to apply them in managing personal finances effectively. Several studies have shown the significance of Financial Literacy in managing debt and achieving financial well-being. Baker et al. (2017) and Mendes-Da-Silva (2018) found that Financial Literacy has a significant impact on debt, where individuals with higher financial literacy have lower debt levels. Potrich & Vieira (2018) emphasize the importance of understanding Financial Literacy From the perspective of human behavior because it is not only about understanding financial concepts but also influenced by behavioral and psychological factors that influence how individuals manage their finances. Next, Rieckens (2019) discusses the roles of financial literacy in behavioral finance in his book "Playing with Fire (Financial Independence Retire Early): How Far Would You Go for Financial Freedom?" This book highlights the importance of having Financial Literacy which is good for achieving financial independence and freedom, and how consumptive behavior such as materialism and compulsive buying can hinder efforts to achieve financial goals. The book also discusses how debt can be an obstacle to achieving financial independence and how good financial management strategies such as saving and investing can help achieve long-term financial goals.

Abdullah et al. (2019) found that positive attitudes towards money, rate of Financial Literacy, Higher ones, and good debt management are positively associated with financial well-being among young workers. Pangestu & Karnadi (2020) investigated the relationship between financial literacy, materialism and saving behavior. The study found that Financial Literacy has a significant positive impact on the saving behavior of Generation Z in Indonesia, while materialism has a significant negative impact. Gilenko & Chernova (2021) found a positive relationship between Financial Literacy and saving behavior among high school students in

Russia. Financial literacy is an important aspect of personal financial management that can help individuals make informed financial decisions and achieve long-term financial goals. It is important to improve Financial Literacy in society to reduce the risk of unhealthy financial behavior and improve overall financial condition. Indebtedness, compulsive buying, and materialism are some unhealthy financial behaviors that can be minimized by a high rate of financial literacy. However, it is still rare for research to link the positive and negative influences of Financial Literacy to individual financial behavioral factors such as indebtedness, compulsive buying, materialism and saving behavior in one research concept, especially on civil servants (PNS) and private employees in Indonesia.

Credit card usage in Indonesia has also increased rapidly. This has been explained by one of the articles in DataIndonesia.id, where Bank Indonesia (BI) recorded an increase in the number of credit cards circulating in Indonesia by 0.84% or 16.56 million credit cards from June 2021 to June 2022 (Widi, 2022). The author thinks that the number of credit card users in Indonesia will continue to increase. This statement is motivated by the convenience and various benefits offered by each credit card manufacturer. Kusindriani (2023) conveys information in one of cekaja.com articles about the various benefits offered by the 6 best credit cards in Indonesia. These benefits will later provoke the desire of individuals to use credit cards.

In addition, public interest in Indonesia to save at banks has also increased. The increase is due to a large number of digital banks, which continue to emerge with all the conveniences and benefits offered. One of the articles in vibiznews.com discusses that the Deposit Insurance Corporation (LPS) records the number of deposit accounts in banks digitally reached 38.2 million in May 2022, but the increase in the number of accounts was not as fast as the number of customer deposits, because, in the same period, the nominal deposits in banks digital reached Rp 49.3 trillion or an increase of 58.1% yoy (Belinda, 2022). Furthermore, the President of the Republic of Indonesia launched a credit card for civil servants in August 2022; this information has been conveyed in an article entitled "Jokowi Launches Civil Servant Credit Card, Here's How to Use It**!"** on CNBC Indonesia page (Princess, 2022). The government credit card can be used to make payments for purchases that can be charged to the state budget after the government credit card issuing bank has fulfilled the cardholder's payment obligations. The banks that issue the cards are BRI, BNI and Bank Mandiri.

In an article from cermati.com (2022), the survey results show that generation Z, aged between 15 to 22 years, and millennials, aged between 23 to 38 years, in Indonesia, have different financial management behaviors in the use of credit cards and the habit of setting aside their money. When shopping with installments, young Indonesians tend to prefer to use Pay Later and credit cards, about 13.8% and 7.6% of respondents, respectively. However, when it comes to cash payments, generations Z and Y are still more likely to use wallets digital or e-wallets. The number reached 67.8% of respondents. In the KIC survey, the majority of generation Z and millennials use credit cards and pay later to buy fashion products, credit, and gadgets. Around 48.5% of respondents choose to shop for fashion and accessories such as clothes, pants, and shoes, 45.5% of respondents buy credit, and 44.8% of respondents use credit cards and pay later to buy .gadget. Apparently, generation Z is the most frequent shopping of fashion products with credit card installments and pay later, reaching 61% of respondents. On average, millennials will allocate their budget for fixed expenses first before buying the items needed. However, the behavior of generation Z is different; they tend to do the opposite of the millennial generation.

The article also explains the behavior of financial management in millennials, showing that as many as 58% of respondents rarely or even never set aside a special budget for saving, and the same thing was experienced by generation Z with the number of respondents reaching 56.6%. In the allocation of funds for monthly routine needs, generation Z places savings and emergency funds in the fourth position as expenses that require the most funds, while investments are in seventh place. Meanwhile, millennials tend to spend money on investments first and then allocate funds for savings. Almost 40% of respondents admitted that they had set aside a portion of their monthly income to save, with an allocation of 1% to 20%. However, the savings prepared are only sufficient for the needs of life for the next 3 months.

Based on some of these explanations, the author made a research concept that relates the influence of financial literacy on financial behavior factors of civil servants (PNS) and private employees. Thus, the purpose of this study is to determine the effect of financial literacy on materialism, compulsive buying, indebtedness, and saving behavior. In addition, there is an influence of materialism on compulsive buying and indebtedness, as well as compulsive buying on indebtedness in civil servants and private employees in the Jakarta area, especially those of millennial age. Furthermore, the authors also want to compare the financial behavior of civil servants (PNS) with that of private employees.

2. Literature Review

2.1 Financial Literacy (FL)

According to Maison (2019), Financial Literacy is an individual's ability to understand and manage their finances effectively, including an understanding of financial concepts, budget management, and wise financial decision making. Financial literacy Every individual is different according to the level of education he has (Potrich & Vieira, 2018). Another opinion explains if there is a possibility that individuals with higher education do not necessarily have knowledge of financial concepts such as the Time value of money, stocks, bonds, and risk diversification, and vice versa, individuals with lower education may have better knowledge of financial concepts than individuals with higher education (Dinç et al., 2017). The function of Financial Literacy is to help individuals make better financial decisions and avoid risky or adverse financial behaviors, such as over-indebtedness, overspending, and impulse buying (Maison, 2019). Further, Maison (2019) said that by having a high level of financial literacy, individuals can increase their awareness of the importance of managing finances wisely, reducing financial risk, and improving their overall financial security.

2.2 Indebtedness (I)

According to Moosa & Ramiah (2017), indebtedness Or a state of debt can occur when individuals borrow money to meet consumption needs or pay existing debts. However, if it is not managed properly, indebtedness can be a heavy financial burden and disrupt an individual's financial stability (Moosa & Ramiah, 2017). Furthermore, Kaiser & Menkhoff (2017) explained that indebtedness refers to a condition in which a person has debts that exceed their ability to repay. While Maison (2019) describes indebtedness Or payable as a condition in which an individual or family has debts that are greater than the ability to repay those debts. Indebtedness can be a significant source of stress and anxiety and can affect an individual's mental and physical health (Maison, 2019). Indebtedness can be caused by a variety of factors, such as overspending, irresponsible use of credit cards, or unforeseen events such as job loss or health problems (Maison, 2019). Unlike the previous one, Xavier et al. (2019) Reveals that a person will experience debt when he borrows money with a commitment to pay in the future. Further, Maison (2019) says that indebtedness can also cause individuals to feel trapped in a cycle of debt that is difficult to overcome and can affect an individual's ability to achieve long-term financial goals.

2.3 Materialism (M)

Materialism can be interpreted as the drive to obtain happiness or satisfaction through the possession of material objects (Moosa & Ramiah, 2017). Next, Maison (2019) explained that materialism refers to the tendency of excessive attitudes towards money and material objects that exert too large a role in one's life. Moosa & Ramiah (2017) says that materialism can influence the spending behavior of individuals, so they tend to spend their money on items that are considered important or prestigious without considering the long-term effects on their finances. Maison (2019) interprets materialism as an individual's tendency to judge themselves and others based on their possession of material objects or wealth. Materialism It is also considered a view of life in which individuals consider happiness and success to be achieved only through the possession of material objects or wealth (Maison, 2019). Further, Maison (2019) says that materialism can influence consumptive behavior and purchasing decisions and can be a risk factor in experiencing financial problems. More materialistic individuals tend to ignore non-material values, such as social relationships and happiness, and focus more on possessing material objects (Maison, 2019).

2.4 Compulsive buying (CB)

Compulsive buying or compulsive buying is uncontrolled and often unnecessary buying behavior (Moosa & Ramiah, 2017). This can be triggered by a desire to meet emotional needs or experience excessive tension, which causes individuals to make purchases without considering the financial consequences (Moosa & Ramiah, 2017). Next, Kaiser & Menkhoff (2017) explained that Compulsive Buying Behavior refers to the tendency to make impulse purchases that are unplanned or financially unnecessary and often excessive. Maison (2019) interprets compulsive buying as a condition in which a person has a strong urge to continue making purchases of goods or services, even though doing so is not necessary or even detrimental to their finances. This can cause individuals to experience financial difficulties and feel anxious, stressed, or depressed as a result of overspending (Maison, 2019).

2.5 Saving Behavior (SB)

Mendes-Da-Silva (2018) defines saving as savings or money that a person saves to deal with unwanted situations or to buy goods of higher value in the future. Further, Mendes-Da-Silva (2018) explain if saving behavior is included in financial behavior. Another opinion means that saving is not spending a portion of the available income within a certain period of time, either because the income is too high for current needs or because the desired product is not yet available but is expected to be available in the future (Raaij, 2016). Raaij (2016) reveals that saving can be a strategy to overcome financial uncertainty in the future. Gilenko & Chernova (2021) say if saving behavior can be formed from an individual's understanding of financial concepts or products, an individual's personality can motivate him to save. Maison (2019) argues that saving behavior can also help individuals achieve long-term financial goals and help mitigate future financial risks. Moreover, saving behavior can also help individuals avoid getting

stuck in conditions that cause debt or indebtedness, which is excessive because they have a reserve of funds that can be used in emergency situations and avoid borrowing money from other parties that can increase the debt burden (Maison, 2019).

2.6 Millennials with Credit Cards

Millennials are those born between 1980-2000 ((Setiyani et al., 2019); it can be concluded that the millennial generation consists of individuals with an age range between 23 to 43 years. Despite lower levels of objective financial knowledge, Millennials tend to rate themselves highly on their financial management skills, suggesting that they may be overconfident in their financial capabilities (Kim et al., 2019). In one of the articles published by CNBN Indonesia, Rossiana (2018) explained that the results of research from Brilio show that the majority of the millennial generation's credit card spending is allocated to several categories, namely electronic products (27%), food and beverages (25%), travel (23%), and product purchases fashion (15%). This indicates that .gadget vacations, hanging out, and fashion become an important thing in the lifestyle of the millennial generation. The article also revealed that in supporting their needs and lifestyle, millennials show ingenuity by trying to save money and find solutions that provide convenience in obtaining the goods they want. When asked about the top reasons for having a credit card, 44% of millennials mentioned that discounts, cashback, and the installment program is the main factor that drives them to have a credit card. In addition, most millennials (60%) do not view credit cards as a symbol of social status. Only 40% of them consider credit cards as a marker of their social status.

3. Relationships Between Variables

3.1 The Relationship between Financial Literacy (FL) and Indebtedness (I)

Baker et al. (2017) said that individuals who have a high level of financial literacy are more likely to have wiser behavior in managing their finances, including in managing debt. They will tend to have a better understanding of how to manage their debt, such as avoiding unnecessary debt and minimizing debt interest costs (Baker et al., 2017). Thus, it can be concluded that a high level of financial literacy can help individuals reduce the risk of financial hardship and a high level of indebtedness (Baker et al., 2017). Therefore, Baker et al. (2017) Suggest that individuals improve their financial literacy to manage their finances wisely and minimize the risk of uncontrolled debt. Mendes-Da-Silva (2018) argues that individuals who have higher levels of financial literacy tend to have higher levels of financial literacy indebtedness, which is lower than individuals who lack financial literacy. This can happen because individuals who have high financial literacy tend to have a better understanding of how to repay their debts, minimize interest costs, and avoid unnecessary debt (Mendes-Da-Silva, 2018). Mitchell & Lusardi (2015) also states that low financial literacy results in individuals not being right in making decisions related to financial products, and this is what makes them more likely to experience debt. Research results in Lusardi & Tufano (2015), Baker et al. (2017), Mendes-Da-Silva (2018), and Potrich & Vieira (2018) also prove that Financial Literacy may lower the level of indebtedness. Based on this explanation, the hypothesis to be built is:

H1: High financial literacy (FL) can reduce indebtedness (I)

3.2 The Relationship of Materialism (M) and Indebtedness (I)

Indebtedness refers to a situation where a person has a debt that is greater than their ability to pay it back (Moosa & Ramiah, 2017). According to Moosa & Ramiah (2017), individuals who tend to be materialistic or give too much importance to wealth and material objects have a tendency to have higher levels of indebtedness. This is because they tend to buy items that exceed their payment ability (Moosa & Ramiah, 2017). Next, Kaiser & Menkhoff (2017) states that behavior materialism can have a negative impact on indebtedness Or the condition of someone who has debts that exceed their ability to pay them, whereas individuals who tend to be materialistic have a higher possibility of being trapped in debt because they tend to buy things that are beyond their financial capabilities. In other words, excessive consumptive behavior due to materialism can increase somebody's level of indebtedness (Kaiser & Menkhoff, 2017). Therefore, it is important for individuals to develop good financial habits and skills to avoid getting stuck in unpayable debt (Kaiser & Menkhoff, 2017). Some other studies such as the study Xavier et al. (2019), Matos et al. (2019), Azma et al. (2019), and Rahman et al. (2020), prove that materialism can improve indebtedness. Based on this explanation, the hypothesis to be built is:

H2: High materialism (M) can increase indebtedness (I)

3.3 Compulsive buying (CB) and Indebtedness (I) relationship

Moosa & Ramiah (2017) disclose that behavior compulsive buying or impulse purchases can contribute to increased levels of indebtedness or debts that exceed the ability to pay them back. This is because individuals who make impulse purchases tend to ignore rational considerations in spending money and may purchase items that are not needed or exceed their financial

capabilities, and over time, this behavior can lead to the accumulation of significant debt (Moosa & Ramiah, 2017). Baker et al. (2017) argue that compulsive buying Can make someone ignore or not pay attention to his true personal financial condition, thus making him unaware of the amount of debt that has been made. As a result, a person will be increasingly entangled in debt and difficult to get out of the condition (Baker et al., 2017). Further, Baker et al. (2017) state that compulsive buying can increase the level of indebtedness. A study by Vieira et al. (2016) indicates that individuals with levels of compulsive buying and ill being perception High ones will tend to have credit card usage rates and have more debt. Potrich & Vieiram (2018) and Wahono & Mother Earth (2020) also prove that compulsive buying can increase the level of indebtedness of individuals. Based on this explanation, the hypothesis to be built is:

H3: High compulsive buying (CB) can increase indebtedness (I)

3.4 The Relationship between Materialism (M) and Compulsive buying (CB)
Kaiser & Menkhoff (2017) explain that behavior materialism may have an impact on the tendency to perform compulsive buying or unplanned and impulsive purchases. Further, Kaiser & Menkhoff (2017) revealed that individuals who have a high level of materialism tend to have a strong desire to buy luxury and expensive consumer goods, even if they do not need them or do not have sufficient funds. This happens because materialistic individuals tend to focus more on fulfilling their consumptive desires, making it more difficult for them to manage their money wisely (Kaiser & Menkhoff, 2017). As a result, they tend to get stuck in debt more often and buy impulsively, which can jeopardize their financial stability in the long run (Kaiser & Menkhoff, 2017). Individuals who tend to be materialistic are more likely to be tempted to buy things that are perceived to represent status or wealth, even if they cannot afford them financially (Moosa & Ramiah, 2017). Nutshell, materialism causes them to become entangled in compulsive buying behavior, which recurs and eventually causes them to experience financial difficulties (Moosa & Ramiah, 2017). Consistent with this theory, several studies suggest a link between materialism and compulsive buying (e.g., Potrich & Vieira, 2018; Pradhan et al., 2018). Based on this explanation, the hypothesis to be built is:

H4: High materialism (M) can increase compulsive buying (CB)

3.5 The Relationship between Financial Literacy (FL) and Materialism (M)
Kaiser & Menkhoff (2017) explained that Financial Literacy could help reduce the negative impact of materialistic behavior on an individual's finances, where a high level of financial literacy is more likely for the individual to understand the importance of managing their money wisely and avoiding excessive consumptive behavior. Therefore, Kaiser & Menkhoff (2017) say that Financial Literacy can help materialistic individuals overcome their weaknesses and improve their financial stability. Financial literacy The high ones will be more likely to choose to save and invest their money for more important long-term goals, such as retirement or their children's education (Baker et al., 2017). Baker et al. (2017) added that individuals with financial literacy tend to consider their needs and wants more before buying expensive or unnecessary consumable products. Thus, Financial Literacy can help individuals reduce their level of materialism and develop a wiser attitude in managing their money (Baker et al., 2017). Further, Potrich & Vieira (2018) disclose that individuals with high financial literacy are able to understand concepts and manage finances well, which in turn can suppress their desire to be materialistic. Study Pangestu & Karnadi (2020) also argue that financial literacy in individuals can press materialism, so they have the ability to manage finances well. Some study results also show that financial literacy negatively affects materialism (e.g., Pham et al., 2012; Potrich & Vieira, 2018; Wahono & Mother Earth, 2020). Based on this explanation, the hypothesis to be built is:

H5: High financial literacy (FL) can reduce materialism (M)

3.6 The relationship between Financial Literacy (FL) and Compulsive buying (CB)
Individuals with Financial Literacy Those high in finance tend to have a better ability to control compulsive buying behavior and limit their spending wisely (Mendes-Da-Silva, 2018). Moreover, Financial Literacy Being high can help individuals understand the long-term impact of unwise financial decision-making, including compulsive buying behavior (Mendes-Da-Silva, 2018). According to Mendes-Da-Silva (2018), improving financial literacy can be an effective strategy to overcome problems of compulsive buying and assist individuals in managing their finances better. Maison (2019) suggests increasing the rate of Financial Literacy In order to help individuals understand the importance of wise financial management and develop the skills necessary to control compulsive buying behavior. With a better understanding of financial risk and effective strategies for managing their finances, individuals who are more financially literate can better avoid compulsive buying behavior and manage their finances better (Maison, 2019). Study results in Potrich & Vieira (2018) Wahono & Mother Earth (2020) help to reinforce the impact of Financial Literacy against a

decrease in levels of compulsive buying. Further, Khandelwal et al. (2021) explained that financial literacy Is high, which makes individuals less likely to use credit cards and make purchases compulsively. Based on this explanation, the hypothesis to be built is:

H6: High financial literacy (FL) can reduce compulsive buying (CB)

3.7 The Relationship between Financial Literacy (FL) and Saving Behavior (SB)

According to Maison (2019), individuals with financial literacy who are high in finance have a greater tendency to save their money than to spend it. They also tend to better understand the benefits of saving for long-term goals, such as retirement or buying a home and are able to better manage their finances (Maison, 2019). Moreover, financial literacy can help individuals identify the sources of their unnecessary expenses and reduce unnecessary expenses (Maison, 2019). Further, Maison (2019) explains that by reducing unnecessary expenses, individuals can save more money and strengthen their ability to save. Overall, increasing the level of financial literacy can help individuals to improve their saving behavior and manage their finances more wisely (Maison, 2019). Nguyen & Doan (2020) Reveal Financial Literacy As an individual's ability to analyze their personal financial condition, it can be said that the more knowledge individuals have about finance, the better they will be in managing and utilizing their finances (Alshebami & Aldhyani, 2022). Gilenko & Chernova (2021) explain that individuals with high levels of Financial Literacy High ones can engage in positive financial behaviors, such as when they are planning their future for a prosperous life and large amounts of savings. Financial literacy Allows individuals to be able to manage their finances efficiently and clearly so that they can make the right investment decisions and saving activities (Alshebami & Aldhyani, 2022). Some studies find a link between Financial Literacy and improvement in saving behavior (e.g., Amari et al., 2020; Pangestu & Karnadi, 2020; Alshebami & Aldhyani, 2022). Based on this explanation, the hypothesis to be built is:

H7: Financial literacy (FL) has a positive effect on saving behavior (SB)

Based on the development of the above hypothesis, the research model is as follows:
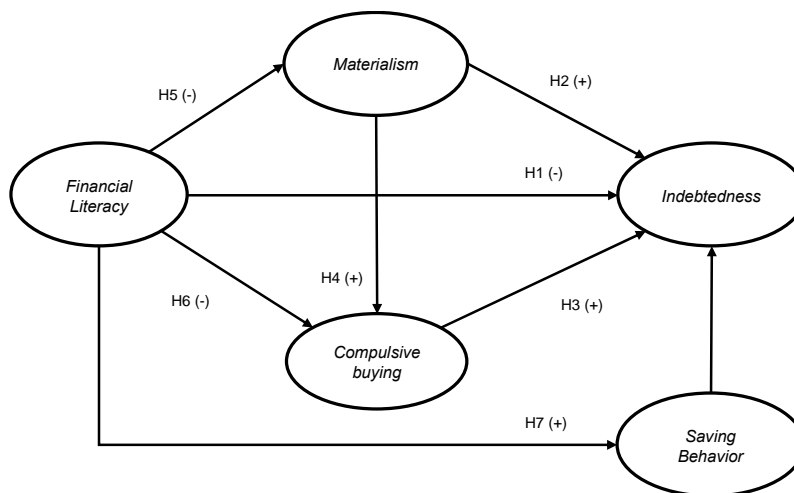
Picture 1. Research Model

3.8 The relationship between financial literacy, materialism, compulsive buying, indebtedness, and saving behavior between civil servants and private employees

There may be differences in the perspective of private employees and civil servants on their finances. In this context, the author wants to make sure and know in more detail whether there are striking differences between the two groups in the overall variables proposed in this study.

Comparison of Financial Literacy (FL) in private employees and civil servants

HO1 = no difference in average financial literacy between civil servants and private employees.
HA1= there is a difference in average financial literacy between civil servants and private employees.

Comparison of Materialism (M) in private employees and civil servants

HO2 = no difference in average materialism between civil servants and private employees.
HA2= there is a difference in average materialism between civil servants and private employees.
Comparison of Compulsive Buying (CB) in private employees and civil servants
HO3 = no difference in average compulsive buying between civil servants and private employees.
HA3= there is an average difference in compulsive buying between civil servants and private employees.

Comparison of Indebtedness (I) in private employees and civil servants

HO4 = no difference in average indebtedness between civil servants and private employees.
HA4= there is a difference in average indebtedness between civil servants and private employees.

Comparison of Saving Behavior (FL) in private employees and civil servants

HO5 = no difference in average saving behavior between civil servants and private employees.
HA5= there is a difference in average saving behavior between civil servants and private employees.

4. Research Methods

This study is quantitative research. Data collection using survey methods is done by distributing questionnaires online, and measurements are made using Likert scales, which are 1-5 (1 = strongly disagree and 5 = strongly agree). Hair et al. (2010) explained that the Likert scale is a type of scale that is often used in quantitative research to measure the attitudes or opinions of respondents. Scale Likert consists of a statement followed by a series of answer choices consisting of five or more categories, such as "strongly agree", "agree", "neutral", "disagree", and "strongly disagree" (Hair et al., 2010).

This research adopts the theory of Alshebami & Aldhyani (2022) to measure variables of Financial Literacy (FL) in as many as 7 statements and variables of saving behavior (SB) in as many as 8 statements variable materialism (M) in as many as 9 statements, variables compulsive buying (CB) in as many as 7 statements and variables indebtedness (I) in a total of 17 statements, adopting theories from Potrich & Vieira (2018). So, the total statement is 48 items, which can be seen in appendices 2 and 3.

The population in this study is private employees and civil servants working in the Jakarta area. The respondents in this study are millennial employees who have worked as private employees or civil servants for more than 1 year and are credit card users. In the context of this study, the minimum age of respondents we need is at least 23 years. For civil servant employees, they are class III and IV civil servant employees with a minimum salary of 4 million. Based on the information I have when applying for a credit card, the minimum salary allowed to apply for a credit card is at least 4 million. In addition, respondents must have a final education status of at least S1. Based on the provisions of the SEM analysis, the minimum number of respondents needed is 100 people and better if it is around 200 people or more (Sudaryono, 2021). Therefore, the author assumes that the total number of respondents to be used in this study is around 520 people, consisting of 260 civil servants and 260 private employees.

According to Rossiana (2018), millennials include active credit card users. Moreover, Rossiana (2018) said that millennials have become responsible for the use of their credit cards. This can be seen from the fact that most millennials (55%) have never reached the maximum limit of their credit card use. In addition, as many as 84% of millennials revealed that they pay credit card bills more often, according to the amount listed. In fact, as many as 72% of millennials claim to never miss a due date in their credit card bill payments. This data was obtained from the results of the Brilio Net survey. On this basis, the author is interested in making millennials the respondents in this study. Data collection will take place in June 2023 (Rossiana, 2018). To collect data in this study, we distributed questionnaires directly to private employees and civil servants spread across the Jakarta area through Google Forms as a means to distribute pre-compiled questionnaires. To see more, find appendix 3.

This study used a difference test method between two independent samples (Independent Samples t-test) to compare the average financial literacy, materialism, compulsive buying, indebtedness and saving behavior between two groups, namely Civil Servants (PNS) and private employees. The results of the difference test will provide information on the significance of differences in financial literacy, materialism, compulsive buying, indebtedness, and saving behavior between civil servants and private employees, as well as the direction of the difference.

Researchers use Google Forms to distribute pre-compiled questionnaires. In the questionnaire validity and reliability test, we used SPSS factor analysis by looking at the values listed in Kaiser Meyer-Olkin (KMO), Measure of Sampling Adequacy (MSA), Cronbach's Alpha value with a minimum limit of 0.5 (Hair et al., 2018). Next, a hypothesis test will be carried out using the method Structural Equation Model (SEM) Lisrel. In addition to these two tests, the authors will use an independent Sample t-test. Most of the statements used to measure the validity and reliability of variables in this study were valid, except for the FL6 and FL7 statements

on the variables Financial Literacy, as well as SB6, SB7 and SB8 in variables saving behavior, M6, M7 and M8 on variables materialism, I3, I8, I9, I10, I11, I12, I13, I14, I15, I16, I17 on variables indebtedness and CB6 and CB7 on variables compulsive buying. So, the total statements used in this study are as many as 27 items. Furthermore, the author uses the Structural Equation Model (SEM) Lisrel to process and analyze the data in this study. Based on the provisions of the SEM Lisrel analysis, the minimum number of respondents needed is 5 times the number of questionnaire questions (Hair et al., 2018), i.e. (27x5) 135 people.

The independent sample t-test is a statistical test that compares the averages of two independent sample groups. Independent sample t-tests were used to see if there were statistically significant differences between the two groups (in terms of average). An Independent sample t-test is included in the parametric test. So, before using this test, we must first make sure that the data we are going to test has met the prerequisite assumptions. This assumption is very important because it affects the validity of the conclusions made. The prerequisite assumptions of the independent sample t-test are as follows:

1. A category variable consists of two categories that are mutually independent of each other.
2. Test variables (bound) are continuous data, both in the form of intervals and ratios.
3. Test variables are normally distributed.
4. The variance of the category variable (against the test variable) is the same.

The formula used for the difference test between two independent samples (Independent Samples t-test) is as follows:

$$t = (X1 - X2) / [(s1^2 / n1) + (s2^2 / n2)]\sqrt{}$$

Here, t is the test value, X1 and X2 are the averages of the first and second samples, s1 and s2 are the standard deviations of each sample, and n1 and n2 are the sizes of each sample.

The following are the steps to calculate t, including:
1. Calculate the average (X) of each sample.
2. Calculate the standard deviation(s) of each sample.
3. Calculate the sample size (n) of each sample.
4. Use the above formula to calculate the value of t.

The basis for decision making:
1. If the value of sig (2 tailed) < 0.05, then HO is accepted, and HA is rejected
2. If the sig (2 tailed) value > 0.05, then HO is rejected, and HA is accepted

HO = there is no difference in the average financial literacy, materialism, compulsive buying, indebtedness, and saving behavior between civil servants and private employees.
HA= there is a difference in the average financial literacy, materialism, compulsive buying, indebtedness, and saving behavior between civil servants and private employees.

4.1 Respondent Demographic Results
Based on the demographic results, the distribution of questionnaires conducted online through google Forms has obtained as many as 538 respondents who match the predetermined criteria. There were 69% of civil servant respondents and 31% private. See the full demographic data of respondents in appendix 4.

4.2 Sem Lisrel Pns Test Results
The results of the construct validity test in this study show that all indicators on each variable are declared acceptable and valid because they have values Loading Factor above 0.50. Furthermore, reliability test results with a minimum limit of values construct reliability of 0.50 and value variance extracted 0,50 (Hair et al., 2018). Value construct reliability at Financial Literacy (FL) 0.85, saving behavior (SB) 0.89, materialism (M) 0.92, indebtedness (I) 0.90, compulsive buying (CB) 0.90. Value variance extracted at Financial Literacy (FL) 0.54, saving behavior (SB) 0.62, materialism (M) 0.66, indebtedness (I) 0.62, compulsive buying (CB) 0.65.

Furthermore, structural test analysis, by looking at the R2 value in each equation, obtained the following results: the first result, the saving behavior (SB) variable, is influenced by financial literacy (FL) with an R2 value of 0.00059. So, it can be interpreted that 0.059% of the saving behavior (SB) variable can be explained by the variable of financial literacy (FL); the remaining 0.941% is influenced by other variables that are not in this study. The second result is that the materialism variable (M) is influenced by financial literacy (FL), with an R2 value of 0.43. Thus, it can be interpreted that 43% of the materialism variable (M) can be explained

by financial literacy (FL), and the remaining 57% is influenced by other variables that are not in this study. The third result, the variable indebtedness (I), is influenced by materialism (M), compulsive buying (CB), and financial literacy (FL), with an R2 value of 1.00. Thus, it can be interpreted that 100% of the variable indebtedness (I) can be explained by variables materialism (M), compulsive buying (CB), and financial literacy (FL). The fourth result is that the compulsive buying (CB) variable is influenced by materialism (M) and financial literacy (FL), with an R2 value of 0.59. Thus, it can be interpreted that 59% of the compulsive buying (CB) variables can be explained by materialism (M) and financial literacy (FL); the remaining 41% is influenced by other variables that are not in this study.

In the model suitability test, the analysis results show that there are still several items with a good fit match level on Chi Square, ECVI, AIC and CAIC, critical N, and Fit Index. Based on the results of the analysis, it can be seen that there is a match among the entire research model even though some of them are at the level of marginal fit match, namely RMSEA and Goodness of fit. To see the full data is in appendix 6. The following are the results of the research depicted in the T-Value diagram:
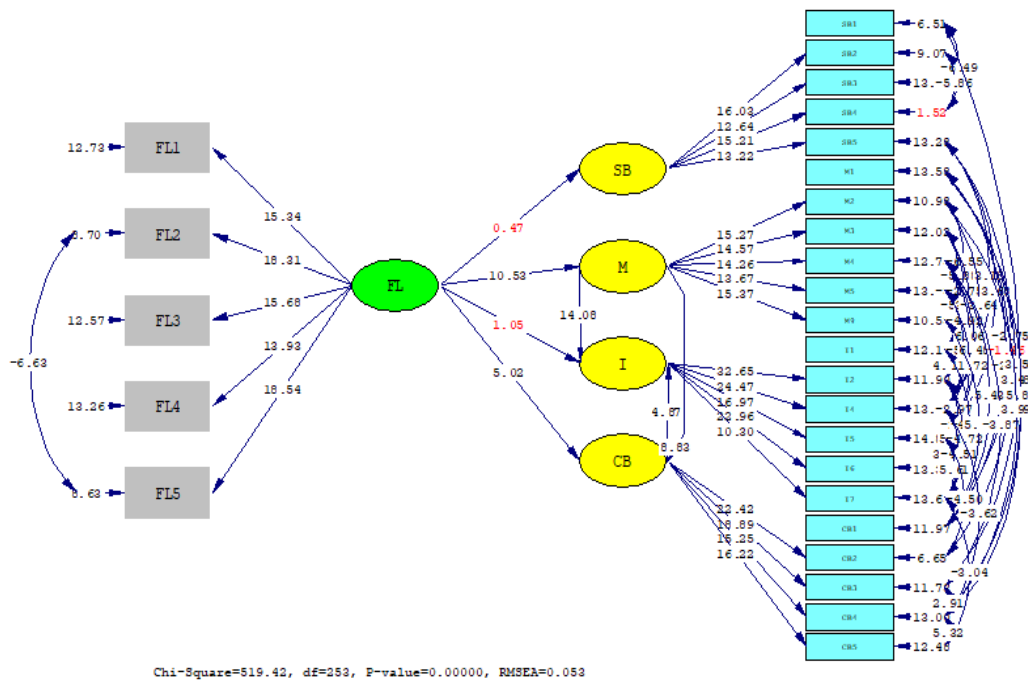
Description: Financial Literacy (FL), Saving Behavior (SB), Materialism (M), Indebtedness (I), and Compulsive Buying (CB)
Figure 2. PNS T-Value Diagram Path

The results of hypothesis testing obtained in this research model can be described in table 1. Hypothesis Testing as follows:

Table 1. PNS Hypothesis Testing

Hypothesis	Hypothesis statement	Value T-Value	Information
H1	High financial literacy (FL) can reduce indebtedness (I)	1,05	Hypothesis rejected
H2	High materialism (M) can increase indebtedness (I)	14,08	Hypothesis accepted
H3	High compulsive buying (CB) can increase indebtedness (I)	4,87	Hypothesis accepted
H4	High materialism (M) can increase compulsive buying (CB)	8,83	Hypothesis accepted
H5	High financial literacy (FL) can reduce materialism (M)	10,53	Hypothesis accepted
H6	High financial literacy (FL) can reduce compulsive buying (CB)	5,02	Hypothesis accepted
H7	Financial literacy (FL) has a positive effect on saving behavior (SB)	0,47	Hypothesis rejected

Source: SEM Lisrel data processing

Based on the table above, there are two hypotheses that have a T-Value value below 1.96, or it can be said that the hypothesis is not accepted. The complete results of the SEM analysis data in this study can be seen in Appendix 6.

4.3 Sem Lisrel Test Results Of Private Employees

The results of the construct validity test in this study show that most of the indicators on each variable are declared acceptable and valid because they have a value Loading Factor above 0.50, except FL5, SB3, SB4, SB5, and CB5. Furthermore, reliability test results with a minimum limit of values construct reliability of 0.50 and value variance extracted 0,50 (Hair et al., 2018). Value construct reliability at Financial Literacy (FL) 0.72, saving behavior (SB) 0.55, materialism (M) 0.90, indebtedness (I) 0.92, compulsive buying (CB) 0.87. Value variance extracted at Financial Literacy (FL) 0,37, saving behaviour (SB) 0,34, materialism (M) 0.60, indebtedness (I) 0.67, compulsive buying (CB) 0.59.

Furthermore, structural test analysis, by looking at the R^2 value in each equation, obtained the following results: the first result, the saving behavior (SB) variable, was influenced by financial literacy (FL) with an R^2 value of 0.0011. Thus, it can be interpreted that 0.11% of the saving behavior (SB) variable can be explained by the variable of financial literacy (FL); the remaining 99.89% is influenced by other variables that are not in this study. The second result is that the materialism variable (M) is influenced by financial literacy (FL), with an R^2 value of 0.011. Thus, it can be interpreted that 1.1% of the materialism variable (M) can be explained by financial literacy (FL), and the remaining 98.9% is influenced by other variables that are not in this study. The third result, the variable indebtedness (I), is influenced by materialism (M), compulsive buying (CB), and financial literacy (FL), with an R^2 value of 0.32. So, it can be interpreted that 32% of the indebtedness (I) variable can be explained by materialism (M), compulsive buying (CB), and financial literacy (FL) variables; the remaining 68% is influenced by other variables that are not in this study. The fourth result is that the compulsive buying (CB) variable is influenced by materialism (M) and financial literacy (FL), with an R^2 value of 0.085. Thus, it can be interpreted that 8.5% of the compulsive buying (CB) variables can be explained by materialism (M) and financial literacy (FL); the remaining 91.5% is influenced by other variables that are not in this study.

In the model suitability test, the analysis results show that there are still several items with a good fit match level on Chi Square, ECVI, AIC and CAIC, as well as the Fit Index. Based on the results of the analysis, it can be seen that there is a match among the entire research model even though some of them are at the level of marginal fit match, namely RMSEA, critical N and Goodness of fit. To see the full data is in appendix 6. The following are the results of the research depicted in the T-Value diagram:
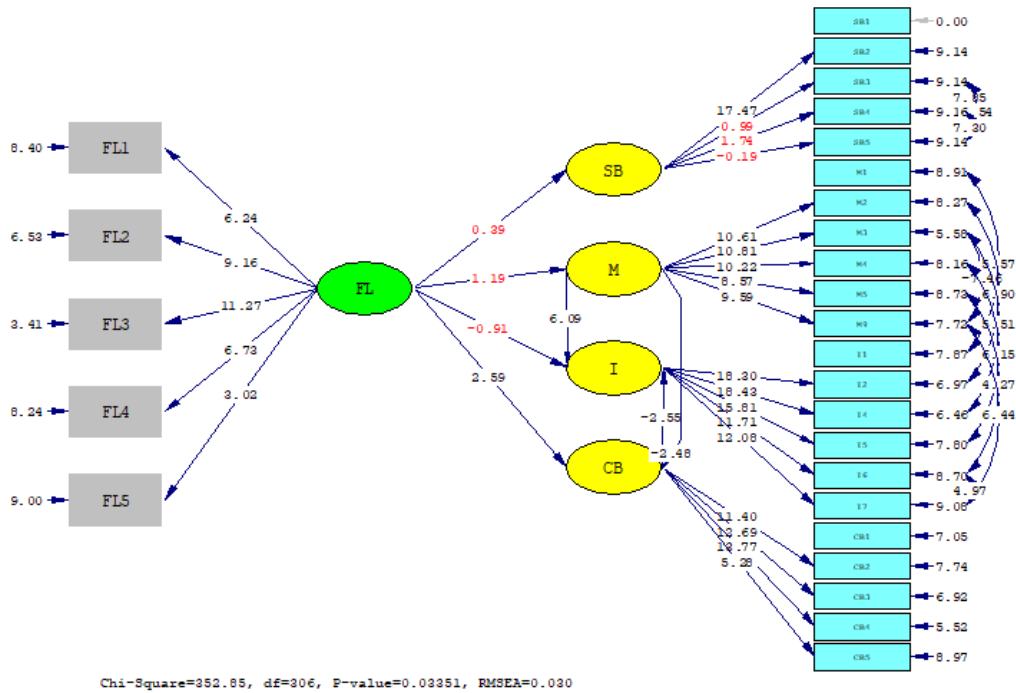
Description: Financial Literacy (FL), Saving Behavior (SB), Materialism (M), Indebtedness (I), and Compulsive Buying (CB)

Figure 3. Private Employee T-Value Diagram Path

The results of hypothesis testing obtained in this research model can be described in table 2. Hypothesis Testing as follows:

Table 2. Private Employee Hypothesis Testing

Hypothesis	Hypothesis statement	Value T-Value	Information
H1	High financial literacy (FL) can reduce indebtedness (I)	-0,91	Hypothesis rejected
H2	High materialism (M) can increase indebtedness (I)	6,09	Hypothesis accepted
H3	High compulsive buying (CB) can increase indebtedness (I)	-2,55	Hypothesis rejected
H4	High materialism (M) can increase compulsive buying (CB)	-2,48	Hypothesis rejected
H5	High financial literacy (FL) can reduce materialism (M)	1,19	Hypothesis rejected
H6	High financial literacy (FL) can reduce compulsive buying (CB)	2,59	Hypothesis accepted
H7	Financial literacy (FL) has a positive effect on saving behavior (SB)	0,39	Hypothesis rejected

Source: SEM Lisrel data processing

Based on the table above, there are five hypotheses that have a T-Value below 1.96, or it can be said that the hypothesis is not accepted. The complete results of the SEM analysis data in this study can be seen in Appendix 6.

Table 3. Conclusion of Hypothesis Testing of Civil Servants and Private Employees

Hypothesis	Hypothesis statement	Information	
		Civil servants	Private
H1	High financial literacy (FL) can reduce indebtedness (I)	Hypothesis rejected	Hypothesis rejected
H2	High materialism (M) can increase indebtedness (I)	Hypothesis accepted	Hypothesis accepted
H3	High compulsive buying (CB) can increase indebtedness (I)	Hypothesis accepted	Hypothesis rejected
H4	High materialism (M) can increase compulsive buying (CB)	Hypothesis accepted	Hypothesis rejected
H5	High financial literacy (FL) can reduce materialism (M)	Hypothesis accepted	Hypothesis rejected
H6	High financial literacy (FL) can reduce compulsive buying (CB)	Hypothesis accepted	Hypothesis accepted
H7	Financial literacy (FL) has a positive effect on saving behavior (SB)	Hypothesis rejected	Hypothesis rejected

Source: SEM Lisrel data processing

4.4. Difference Test Results (Independent sample t-test)

In a comparison of Financial Literacy (FL) in private employees and civil servants, the test results showed that:

Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Financial Literacy	Private	168	20.7738	2.60286	.20081
	Civil servants	370	21.5838	2.94939	.15333

Source: SPSS Output

Based on the table above, it can be explained that the average financial literacy (FL) in private employees is 20.7, while in civil servants, it is 21.58. In this case, it can be said that the average level of financial literacy among private employees is smaller than that of civil servants.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Financial Literacy	Equal variances assumed	7.714	.006	-3.059	536	.002	-.80997	.26477	-1.33008	-.28987
	Equal variances not assumed			-3.206	362.693	.001	-.80997	.25266	-1.30684	-.31311

Source: SPSS Output

Based on the table above, the value of Sig can be explained. (2-tailed) financial literacy (FL) in private employees is 0.002, while in civil servants, it is 0.001; both values are <0.005. So, it can be said that HO1 is accepted. Where in this case, there is no difference in average financial literacy between civil servants and private employees.

Comparison of Materialism (M) in private employees and civil servants

The test results showed that:

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Materialism	swasta	168	25.6429	3.72769	.28760
	PNS	370	25.6351	4.28135	.22258

Source: SPSS Output

Based on the table above, it can be explained that the average materialism (M) in private employees is 25.64, while in civil servants, it is 25.63. In this case, it can be said that the average level of materialism among private employees is greater than that of civil servants.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Materialism	Equal variances assumed	2.551	.111	.020	536	.984	.00772	.38300	-.74464	.76009
	Equal variances not assumed			.021	367.321	.983	.00772	.36367	-.70741	.72285

Source: SPSS Output

Based on the table above, it can be explained that the value of Sig. (2-tailed) materialism (M) in private employees is 0.984, while in civil servants, it is 0.983; both values are >0.005. So, it can be said that HA2 is accepted. In this case, there is a difference in average materialism between civil servants and private employees.

Comparison of Compulsive Buying (CB) in private employees and civil servants

The test results showed that:

Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Compulsive Buying	private	168	19.1845	3.05761	.23590
	Civil servants	370	19.4486	4.17163	.21687

Source: SPSS Output

Based on the table above, it can be explained that the average compulsive buying (CB) in private employees is 19.18, while in civil servants, it is 19.44. In this case, it can be said that the average level of compulsive buying among private employees is smaller than that of civil servants.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Compulsive Buying	Equal variances assumed	24.292	.000	-.736	536	.462	-.26412	.35803	-.96940	.44115
	Equal variances not assumed			-.824	429.677	.410	-.26412	.32044	-.89395	.36570

Source: SPSS Output

Based on the table above, it can be explained that the value of Sig. (2-tailed) compulsive buying (CB) in private employees is 0.462, while in civil servants, it is 0.410; both values are >0.005. So, it can be said if HA3 is accepted. Where in this case, there is a difference in average compulsive buying between civil servants and private employees.

Comparison of Indebtedness (I) in private employees and civil servants

The test results showed that:

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Indebtedness	swasta	168	24.2619	4.20755	.32462
	PNS	370	25.5703	4.43950	.23080

Source: SPSS Output

Based on the table above, it can be explained that the average indebtedness (I) in private employees is 24.26, while in civil servants, it is 25.57. In this case, it can be said that the average rate of indebtedness among private employees is smaller than that of civil servants.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Indebtedness	Equal variances assumed	1.810	.179	-3.219	536	.001	-1.30837	.40642	-2.10673	-.51000
	Equal variances not assumed			-3.285	339.273	.001	-1.30837	.39830	-2.09182	-.52491

Source: SPSS Output

Based on the table above, it can be explained that the value of Sig. (2-tailed) indebtedness (I) in private employees is 0.001, while in civil servants, it is 0.001; both values are <0.005. So, it can be said if HO4 is accepted. Where in this case, there is no difference in average indebtedness between civil servants and private employees.

In a comparison of Saving Behavior (FL) in private employees and civil servants, the test results showed that:

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Saving Behaviour	swasta	168	16.3631	2.90039	.22377
	PNS	370	14.0811	3.15437	.16399

Source: SPSS Output

Based on the table above, it can be explained that the average saving behavior (SB) in private employees is 16.36, while in civil servants, it is 14.08. In this case, it can be said that the average level of saving behavior among private employees is greater than that of civil servants.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Saving Behaviour	Equal variances assumed	.767	.381	7.971	536	.000	2.28201	.28631	1.71959	2.84444
	Equal variances not assumed			8.226	348.989	.000	2.28201	.27743	1.73638	2.82765

Source: SPSS Output

Based on the table above, it can be explained that the value of Sig. (2-tailed) saving behavior (SB) in private employees is 0.000, while in civil servants, it is 0.000; both values are <0.005. So, it can be said if HO5 is accepted. Where in this case, there is no difference in average saving behavior between civil servants and private employees.

Table 4. Difference Test Hypothesis

Hypothesis statement	Value Sig. (2-tailed)		Information
	Private	Civil servants	
HO1= there is no difference in average financial literacy between civil servants and private employees. HA1= there is a difference in average financial literacy between civil servants and private employees.	0,002	0,001	HO1 accepted
HO2= there is no difference in average materialism between civil servants and private employees. HA2= there is a difference in average materialism between civil servants and private employees.	0,984	0,983	HO2 deprecated
HO3= there is no difference in average compulsive buying between civil servants and private employees. HA3= there is an average difference in compulsive buying between civil servants and private employees.	0,462	0,410	HO3 deprecated
HO4= no difference in average indebtedness between civil servants and private employees. HA4= there is a difference in average indebtedness between civil servants and private employees.	0,001	0,001	HO4 accepted
HO5= there is no difference in average saving behavior between civil servants and private employees. HA5= there is a difference in average saving behavior between civil servants and private employees.	0,000	0,000	HO5 accepted

Source: SPSS data processing results

5. Discussion

The first result proves that Financial Literacy (FL) cannot reduce indebtedness (I) among civil servants and private employees. This differs from Mendes-Da-Silva (2018) that individuals who have higher levels of financial literacy tend to have higher levels of financial literacy indebtedness, which is lower compared to individuals who lack financial literacy. Respondents' understanding of managing credit cards well was not a factor that influenced their view of the concept of owning something now and paying it later. In addition, this study also shows that high levels of financial literacy do not affect the views of respondents, who tend to think it is better to go into debt than not to give gifts to a family. Even though a person has a high level of financial literacy, it does not necessarily mean that they will tend to reduce the level of indebtedness. Researchers have previously argued that there are other factors that could influence indebtedness, one of them materialism, where materialistic individuals may be less aware of good financial management, including the risks of debt and its implications, they may tend to ignore important financial aspects and focus more on fulfilling instant wants and needs (Moosa & Ramiah, 2017; Baker et al., 2017). Therefore, even if someone has a good knowledge of finance, they do not necessarily have the same view related to debt. In the results of the difference test, no average comparison was found between Financial Literacy and indebtedness, which is significant among civil servants and private employees. From this, it can be seen that there are similarities between their perspectives and related mindsets: Financial Literacy and indebtedness.

Second, this study successfully proved materialism (M) can increase indebtedness (I) among civil servants and private employees. Excessive individual consumptive behavior due to materialism can increase somebody's level of indebtedness (Kaiser & Menkhoff, 2017). Respondents have the view that the items they own reflect the success of their lives, which encourages their view of the concept of owning something now and paying for it later because they think it is better to owe than not give gifts to the family. This statement is in line with the opinion Moosa & Ramiah (2017) that individuals who tend to be materialistic or give too much importance to wealth and material objects have a tendency to have levels of indebtedness higher ones. This is because they tend to buy items that exceed their payment ability (Moosa & Ramiah, 2017). In the results of the difference test, an average comparison was found to materialism significant among civil servants and private employees, where the level of materialism among private employees is larger than that of civil servants, while for indebtedness, There was no significant average comparison between the two. From this, it can be seen that there is a difference between their perspective and mindset related to materialism but not indebtedness.

Third, compulsive buying (CB) high can increase the indebtedness (I) of civil servants, but compulsive buying (CB) high cannot increase the indebtedness (I) of swasra employees. For civil servants, these results are consistent with previous research that suggested a role of compulsive buying (CB) in influencing indebtedness (e.g., Moosa & Ramiah, 2017), but not with the results obtained from testing the relationship of these variables in private employees found that there was a different response between civil servants and private employees, whereas private employees' spending habits were not a factor in their committing debt. Meanwhile, civil servants' shopping habits can be their basis for paying off debt. Generally, the salary of private employees is indeed greater than that of civil servants; there is a possibility that private employees have a part of the money devoted to shopping so as not to make them owe. In addition, this can be caused by differences in views between the two groups regarding the causes of their debt. Previously, Maison (2019) Xavier et al. (2019) It has been outlined that there are many factors that can influence consumptive behavior and views on debt, including income level, level of self-control in managing finances, and level of awareness about the importance of managing debt. In the results of the difference test, an average comparison was found compulsive buying significant among civil servants and private employees, where the level of compulsive buying private employees are larger than civil servants, while for indebtedness There was no significant average comparison between the two. From this it can be seen that there is a difference between their perspective and mindset related compulsive buying but not with indebtedness.

Fourth, materialism (M) may reduce compulsive buying (CB) in civil servants, whereas materialism (M) cannot reduce compulsive buying (CB) in private employees. In civil servants, these results are in line with the opinion of Kaiser & Menkhoff (2017), who reveals that high levels of materialism tend to feel a strong urge to buy luxury and expensive things, although in some cases, they do not really need it or do not even have adequate financial resources. In this context, civil servants tend to be better able to control their impulse spending impulses thanks to a more mature understanding of materialism. However, different situations occur in private employees. Research shows that the level of materialism in private employees does not have a significant impact on reducing behavior compulsive buying. In contrast to the findings of civil servants, private employees who associate ownership of luxury goods with their personal image of success did not influence other people's reactions to their excessive shopping behavior. Conversely, other people's surprised responses to the spending habits of materialistic private employees had little effect. These findings indicate the complexity of social dynamics and perceptions that influence the impact of materialism on consumptive behavior in two different work contexts. Further, Moosa & Ramiah (2017) explained that psychological roles and motivations are involved in consumptive behavior. Individuals with high levels of materialism may seek to satisfy emotional needs, such as the desire to be recognized or accepted in a particular social group, by purchasing luxury items as symbols of status or life success. In the results of the difference test, an average comparison found materialism and compulsive buying significant among civil servants and private employees, where the level of materialism and compulsive buying among private employees is larger than among civil

servants. These findings suggest that work dynamics and context, as well as perceptions of success and status, can play an important role in the way materialism influences consumptive behavior.

Fifth, the results showed that there was a significant difference in the influence of Financial Literacy against materialism between the two groups. For civil servants, the level of financial literacy is the highest one, which has an impact on reducing the level of materialism. This view is in line with the concept described by Kaiser & Menkhoff (2017), which states that financial literacy can help reduce the negative effects of materialistic behavior on an individual's financial condition. In this context, higher levels of financial literacy allow individuals to understand the importance of managing money wisely so that they can avoid excessive consumptive behavior. However, differences in results appear in private employees. High financial literacy does not fully contribute to reducing materialism in this group. Although financial literacy allows individuals to understand the importance of prudent financial management, the results of the questionnaire show that the majority of respondents to private employees tend to still consider ownership of luxury items as a reflection of their life success. These findings are in line with the opinions of Baker et al. (2017), which illustrate how financial literacy affects the consideration of needs and wants in purchasing. Although financial literacy can be helpful in aspects of financial management, perceptions of personal success and social status can have a stronger influence in directing the materialistic behavior of private employees. In the results of the difference test, an average comparison was found materialism significant among civil servants and private employees, where the level of materialism among Private employees is larger than among civil servants, but no comparative average is found in Financial Literacy, which is significant among civil servants and private employees. These findings suggest that private employees are more likely to have a drive to associate material goods with their status and life success compared to civil servants, whereas financial literacy does not appear to be influenced by employment status, meaning that both civil servants and private employees have similar levels of understanding of personal finance concepts.

Sixth, Financial Literacy (FL) can reduce compulsive buying (CB) among civil servants and private employees. Mendes-Da-Silva (2018) argues that individuals with financial literacy who are high in finance tend to have a better ability to control compulsive buying behavior and limit their spending wisely. Respondents in this study understand managing credit cards well and tend to feel others will be surprised if they know their shopping habits; this can be seen from the responses of the majority of statements they chose from several statements in the questionnaire. This condition is in line with the opinion of Khandelwal et al. (2021), which explains that Financial Literacy The high rate in individuals makes them less likely to use credit cards and make purchases compulsively. In the results of the difference test, an average comparison was found compulsive buying significant among civil servants and private employees, where the level of compulsive buying among Private employees is larger than among civil servants, but no comparative average is found in Financial Literacy, which is significant among civil servants and private employees. These findings indicate that private employees tend to be more susceptible to impulse buying behavior that can negatively impact their personal finances. Meanwhile, the level of understanding of the concept of personal finance, represented by financial literacy, does not seem to be influenced by the type of work. In other words, both civil servants and private employees have a comparable understanding of the aspects of personal finance.

Seventh, financial literacy (FL) has no positive effect on saving behaviour (SB) in civil servants and private employees. This result indicates a discrepancy with the view of Nguyen & Doan (2020) and Alshebami & Aldhyani (2022), which describe financial literacy as an individual's ability to analyze personal financial conditions, and the higher an individual's level of financial knowledge, the better they are at managing and utilizing their financial aspects. Similarly, these results contradict the opinion of Gilenko & Chernova (2021), which indicates that individuals with higher financial literacy tend to adopt positive financial behaviors, including thoughtful future planning and significant accumulation of savings. In this context, the findings show the complexity of the interaction between financial literacy and saving behavior. Although financial literacy may be able to provide better knowledge of the benefits of saving and financial planning, other factors such as motivation, culture, and personal economic conditions can moderate the relationship between financial literacy and saving behavior. The discrepancy between research findings and previous views underscores the importance of considering broader contextual factors in analyzing the impact of financial literacy on individual financial behavior. The results of different tests in this study revealed that there was no significant difference in the average level of financial literacy and saving behavior between two groups of workers, namely Civil Servants (PNS) and private employees. Financial literacy refers to an individual's understanding of aspects of personal finance, while saving behavior reflects an individual's tendency to allocate and manage financial resources for savings purposes. While there is hope that civil servants and private sector employees may have differences in terms of financial literacy and saving habits, these findings suggest that both groups have similar levels of financial literacy and saving behavior. Although there were no significant differences in financial literacy and saving behavior, this should not be interpreted as no difference at all in financial habits and resource management among civil servants and private employees. Other factors, such as spending habits, financial goals, and personal economic conditions, may also play an important role in shaping an individual's financial behavior.

6. Conclusion

Based on the results of the research presented, several significant findings emerged regarding the relationship between the variables studied. First, high levels of financial literacy are unable to reduce the level of indebtedness (I) among civil servants and private employees. Second, high materialism (M) correlated with increased levels of indebtedness (I) in both groups of workers. Third, a high level of compulsive buying (CB) only has the effect of increasing indebtedness (I) in civil servants but does not apply to private employees. Fourth, high materialism (M) encourages an increase in the rate of compulsive buying (CB) in civil servants but not in private employees. Furthermore, it was found that a high level of financial literacy (FL) has the potential to reduce materialism (M) in civil servants but does not apply to private employees. Meanwhile, high financial literacy also has a positive impact on reducing compulsive buying (CB) behavior in civil servants and private employees. However, financial literacy (FL) does not have a positive influence on saving behavior (SB) among civil servants and private employees.

Furthermore, in terms of comparison between private employees and civil servants, this study shows that private employees tend to have higher levels of materialism and impulse buying behavior compared to civil servants. Despite this, there were no significant differences in levels of financial literacy, indebtedness, and saving behavior between the two groups. The findings mean that efforts to improve financial literacy and reduce debt levels could be undertaken with similar approaches for both groups.

The author realizes that there are still some limitations in this study that can be addressed in further research in the future, including the fact that this study may have limitations in terms of generalizing the results to a wider population. The findings may only apply to Civil Servants (PNS) and private employees in certain locations or contexts. This study only considers variables of financial literacy, materialism, compulsive buying, indebtedness, and saving behavior. It is possible that other factors, such as cultural factors, personal characteristics, or other economic factors, may also have an effect on the observed results. The next research suggestion is to conduct more in-depth research to understand differences in other factors that might affect financial literacy, indebtedness, and saving behavior among civil servants and private employees. Incorporate additional variables such as cultural factors, education, age, and economic status into the analysis to get a complete picture of the factors influencing financial behavior. Design further research that can identify cause-and-effect relationships between certain variables. The use of experimental design or longitudinal analysis can help uncover the dynamics of these relationships.

Some suggestions for civil servants and private employees in overcoming financial situations found in this study include (1) **Financial Literacy Development** by participating in financial literacy training programs organized by the government or trusted financial institutions, utilizing online resources, such as webinars, articles, and videos, to expand knowledge about financial literacy, and forming communities or discussion groups to Sharing knowledge and experience related to finance. (2) **Management of materialism by** practicing wise shopping principles, such as making grocery lists and avoiding impulse purchases, focusing on things that are more important than material objects, such as social relationships and self-development, and engaging in voluntary or charitable activities to distract from materialistic aspects. (3) **Control Cumulative Purchases** by considering imposing monthly spending limits and adhering to them with discipline, using "distraction" methods by avoiding situations that encourage compulsive buying behavior, and consulting an expert or psychologist if the problem is difficult to overcome on your own. (4) **Management of Indebtedness by making a careful budget plan and adhering to avoid uncontrolled debt accumulation,** avoid consumer debt and consider alternative sources of funding, such as emergency funds or savings, and if in debt, seek solutions such as debt restructuring or financial counseling. (5) **Improve Saving Behavior by** setting short-term and long-term savings goals to motivate, using automation to move a portion of income to a savings account automatically each month, considering investing according to risk profile and financial goals. (6) **Participation in Further Research by** participating in further research on financial literacy or financial behavior and contributing to interviews, surveys, or discussion groups to help develop a better understanding as well as share your personal experience in overcoming financial challenges to provide valuable insights to researchers.

By applying the above suggestions, civil servants and private employees can gradually overcome the limitations identified in the study and improve their financial literacy and financial behavior.

The theoretical implication obtained from this study is that these findings support the theory that financial literacy can influence financial behavior, such as materialism, compulsive buying, and indebtedness. This underscores the importance of financial education in shaping consumer behavior. Furthermore, the results that financial literacy does not have a positive impact on saving behavior show the complexity of the relationship between understanding finance and saving behavior. Theories about psychological and motivational factors in financial decision making may need to be considered.

The managerial implication obtained from this study is that organizations and institutions can design financial literacy programs aimed specifically at these two groups of employees. Increased financial understanding can help reduce levels of materialism and impulse buying behavior. Debt management and financial planning programs can also provide benefits for both groups. Although financial literacy does not directly affect saving behavior, by understanding the relationship between financial literacy and other financial behaviors, individuals can better understand the importance of saving. These results can help companies or government agencies in designing better policies or incentives to boost the financial well-being of their employees. The study can also encourage the development of financial education initiatives in schools and universities, helping students understand the importance of financial literacy early on. Companies or government agencies can work with financial institutions to provide access to information, resources, and tools that can help individuals better manage debt. Nevertheless, it is important to remember that these suggestions and implications are general in nature and can be tailored to the specific policies and context of each organization or institution.

Conflicts of Interest: The authors declare no conflict of interest.
Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

References

[1] Abdullah, N., Fazli, S. M., & Arif, A. M. M. (2019). The Relationship between attitude towards money, financial literacy and debt management with young worker's financial well-being. *Pertanika Journal of Social Sciences and Humanities*, *27*(1), 361–387.

[2] Alshebami, A. S., & Aldhyani, T. H. H. (2022). The Interplay of Social Influence, Financial Literacy, and Saving Behaviour among Saudi Youth and the Moderating Effect of Self-Control. *Sustainability*, *14*(8780), 1–18.

[3] Amari, M., Salhi, B., & Jarboui, A. (2020). Evaluating the effects of sociodemographic characteristics and financial education on saving behavior. *International Journal of Sociology and Social Policy*. https://doi.org/10.1108/IJSSP-03-2020-0048

[4] Azma, N., Rahman, M., Adeyemi, A. A., & Rahman, M. K. (2019). Propensity toward indebtedness: evidence from Malaysia. *Review of Behavioral Finance*, *11*(2), 188–200. https://doi.org/10.1108/RBF-05-2017-0046

[5] Baker, H. K., Filbeck, G., & Ricciardi, V. (2017). *Financial Behavior: Players, Services, Products, and Markets* (FINANCIAL; H. K. B. and G. Filbeck, Ed.). United States of America: Oxford University Press.

[6] Belinda. (2022). Minat Masyarakat Menabung di Bank Digital Meningka. Retrieved August 8, 2022, from vibiznews.com website: https://www.vibiznews.com/2022/08/08/minat-masyarakat-menabung-di-bank-digital-meningkat/#:~:text=Minat Masyarakat Menabung di Bank Digital Meningkat By,bank digital mencapai 38%2C2 juta pada Mei 2022

[7] cermati.com. (2022). Survei: Kartu Kredit dan Paylater Jadi Andalan Anak Muda Belanja Cicilan. Retrieved from Cermati.com website: https://www.cermati.com/artikel/kartu-kredit-dan-paylater-jadi-andalan-anak-muda-belanja-cicilan

[8] Dinç Aydemir, S., & Aren, S. (2017). Do the effects of individual factors on financial risk-taking behavior diversify with financial literacy? *Kybernetes*, *46*(10). https://doi.org/10.1108/K-10-2016-0281

[9] Doumpos, M., Lemonakis, C., Niklis, D., & Zopounidis, C. (2019). *Analytical Techniques in the Assessment of Credit Risk: An Overview of Methodologies and Applications* (Series Edi; M. G. Speranza & J. F. Oliveira, Eds.). https://doi.org/10.1007/978-3-319-99411-6

[10] Gilenko, E., & Chernova, A. (2021). Saving behavior and financial literacy of Russian high school students: An application of a copula-based bivariate probit-regression approach. *Children and Youth Services Review*, *127*(June), 1–15. https://doi.org/10.1016/j.childyouth.2021.106122

[11] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (seventh). United States of America: Pearson Prentice Hall.

[12] Jr, J. F. H., Black, W. C., Babin, B. J., Anderson, R. E., Black, W. C., & Anderson, R. E. (2018). *Multivariate Data Analysis*. https://doi.org/10.1002/9781119409137.ch4

[13] Kaiser, T., & Menkhoff, L. (2017). *Does Financial Education Impact Financial Literacy and Financial Behavior, and if So, When?* (DIW Discus). Retrieved from http://www.diw.de/discussionpapers

[14] Khandelwal, R., Kolte, A., Veer, N., & Sharma, P. (2021). Compulsive Buying Behaviour of Credit Card Users and Affecting Factors Such as Financial Knowledge, Prestige and Retention Time: A Cross-sectional Research. *Vision*, *26*(2), 1–9. https://doi.org/10.1177/0972262920981428

[15] Kim, K. T., Anderson, S. G., & Seay, M. C. (2019). Financial Knowledge and Short-Term and Long-Term Financial Behaviors of Millennials in the United States. *Journal of Family and Economic Issues*, *40*(2), 194–208. https://doi.org/10.1007/s10834-018-9595-2

[16] Kusindriani, N. (2023). 6 Kartu Kredit Terbaik 2023 Ini Beri Segudang Keuntungan. Retrieved January 31, 2023, from cekaja.com website: https://www.cekaja.com/info/wajib-punya-6-kartu-kredit-terbaik-ini-beri-segudang-keuntungan

[17] Lusardi, A. (2019). Financial literacy and the need for financial education: evidence and implications. *Swiss Journal of Economics and Statistics*, *155*(1), 1–8. https://doi.org/10.1186/s41937-019-0027-5

[18] Lusardi, A., Mitchell, O. S., & Curto, V. (2010). The Journal of Consumer Affairs. *The Journal of Consumer Affairs*, *44*(2), 358–380. Retrieved from http://www.councilforecon.org/wp/wp-content/uploads/2011/11/Financial-Literacy-for-Young-Lusardi.pdf

[19] Lusardi, A., & Tufano, P. (2015). Debt literacy, financial experiences, and overindebtedness. In *Journal of Pension Economics and Finance* (Vol. 14). https://doi.org/10.1017/S1474747215000232

[20] Maison, D. (2019). *The Psychology of Financial Consumer Behavior*. https://doi.org/10.1007/978-3-030-10570-9_4

[21] Matos, C. A. de, Vieira, V., Bonfanti, K., & Mette, F. M. B. (2019). Antecedents of indebtedness for low-income consumers: the mediating role of materialism. *Journal of Consumer Marketing*, *36*(1), 92–101. https://doi.org/10.1108/JCM-09-2017-2352

[22] Mendes-Da-Silva, W. (2018). Individual behaviors and technologies for financial innovations. In *Individual Behaviors and Technologies for Financial Innovations*. https://doi.org/10.1007/978-3-319-91911-9

[23] Mitchell, O. S., & Lusardi, A. (2015). Financial Literacy and Economic Outcomes: Evidence and Policy Implications *The Journal of Retirement*, *3*(1), 107–114. https://doi.org/10.3905/jor.2015.3.1.107

[24] Moosa, I. A., & Ramiah, V. (2017). The Financial Consequences Of Behavioural Biases: An Analysis of Bias in Corporate Finance and Financial Planning Imad. In *The Financial Consequences of Behavioural Biases*. https://doi.org/10.1007/978-3-319-69389-7_5

[25] Nguyen, V. T., & Doan, M. D. (2020). The Correlation between Financial Literacy and Personal Saving Behavior in Vietnam. *Asian Economic and Financial Review*, *10*(6), 590–603. https://doi.org/10.18488/journal.aefr.2020.106.590.603

[26] Ogaki, M., & Tanaka, S. C. (2017). Behavioural Economics: Toward a New Economics by Integration with Traditional Economics. In *Springer* (12th ed.). Singapore: Springer Nature.

[27] Pangestu, S., & Karnadi, E. B. (2020). The effects of financial literacy and materialism on the savings decision of generation Z Indonesians. *Cogent Business and Management*, *7*(1). https://doi.org/10.1080/23311975.2020.1743618

[28] Pham, T. H., Yap, K., & Dowling, N. A. (2012). The impact of financial management practices and financial attitudes on the relationship between materialism and compulsive buying. *Journal of Economic Psychology*, *33*(3), 461–470. https://doi.org/10.1016/j.joep.2011.12.007

[29] Potrich, A. C. G., & Vieira, K. M. (2018). Demystifying financial literacy : a behavioral perspective analysis. *Management Research Review*. https://doi.org/10.1108/MRR-08-2017-0263

[30] Pradhan, D., Israel, D., & Jena, A. K. (2018). Materialism and compulsive buying behaviour: The role of consumer credit card use and impulse buying. *Asia Pacific Journal of Marketing and Logistics*, *30*(5), 1239–1258. https://doi.org/10.1108/APJML-08-2017-0164

[31] Putri, C. A. (2022). Jokowi Luncurkan Kartu Kredit PNS, Ini Cara Pakainya! Retrieved August 29, 2022, from CNBC Indonesia website: https://www.cnbcindonesia.com/tech/20220829104032-37-367301/jokowi-luncurkan-kartu-kredit-pns-ini-cara-pakainya

[32] Raaij, w. F. van. (2016). *Understanding Consumer Financial Beaviour*.

[33] Rahman, M., Azma, N., Masud, M. A. K., & Ismail, Y. (2020). Determinants of indebtedness: Influence of behavioral and demographic factors. *International Journal of Financial Studies*, *8*(1). https://doi.org/10.3390/ijfs8010008

[34] Rieckens, S. (2019). *Playing with fire (financial independence retire early) : how far would you go for financial freedom?* (first prin). Canada: Green Press Initiative.

[35] Rossiana, G. (2018). Mengenal Milenial dan Cara Mereka Menggunakan Kartu Kredit. Retrieved from CNBN Indonesia website: https://www.cnbcindonesia.com/lifestyle/20180130171642-33-2945/mengenal-milenial-dan-cara-mereka-menggunakan-kartu-kredit.

[36] Setiyani, A., Djumarno, D., Riyanto, S., & Nawangsari, L. C. (2019). the Effect of Work Environment on Flexible Working Hours, Employee Engagement and Employee Motivation. *International Review of Management and Marketing*, *9*(3), 112–116. https://doi.org/10.32479/irmm.8114

[37] Sudaryono, D. (2021). *Metodelogi Penelitian: kuantitatif, Kualitatif, dan Mix Method* (Edisi Kedu). Depok: Rajawali Pers, PT RajaGrafindo Persada.

[38] Vieira, K. M., de Oliveira, M. O. R., & Kunkel, F. I. R. (2016). The Credit Card Use and Debt: Is there a trade-off between compulsive buying and ill-being perception? *Journal of Behavioral and Experimental Finance*, *10*, 75–87. https://doi.org/10.1016/j.jbef.2016.03.001

[39] Wahono, H. K., & Pertiwi, D. (2020). Pengaruh Financial Literacy, Materialism, Compulsive Buying Terhadap Propensity To Indebtedness. *International Journal of Financial and Investment Studies (IJFIS)*, *1*(1), 1–14. https://doi.org/10.9744/ijfis.1.1.1-14

[40] Widi, S. (2022). Jumlah Kartu Kredit Beredar Capai 16,58 Juta pada Juni 2022. Retrieved August 30, 2022, from DataIndonesia.id website: https://dataindonesia.id/digital/detail/jumlah-kartu-kredit-beredar-capai-1658-juta-pada-juni-2022

[41] Xavier, T., Marlette Cassia Oliveira Ferreira, & Flavio Santino Bizarrias. (2019). The Relation Between Financial Attitude, Consumer Purchasing Behavior And Debt Background. *Revista Brasileira de Marketing*, *18*(4), 220–231. https://doi.org/10.5585/remark.v18i4.13898